

July 2015

Grant County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 14 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Grant County economy.¹ These 14 sectors have a total direct output of approximately \$487 million and support 568.6 jobs in Grant County. Running the model for all 14 sectors simultaneously produces the following results:

Agriculture Contribution in Grant County

Impact Type ²	Employment	% of Total Employment	Total Value Added ³	% of Gross Regional Product ⁴	Output ⁵	% of Gross Regional Product
Direct Effect	568.6	11%	\$178,870,029	34%	\$486,984,343	93%
Indirect Effect	611.1	12%	\$47,760,140	9%	\$75,483,895	14%
Induced Effect	244.0	5%	\$19,253,230	4%	\$33,563,249	6%
Total Effect	1,423.7	28%	\$245,883,399	47%	\$596,031,488	114%

As shown in the above table, agriculture, food, and food processing supports 1,423.7 jobs, or 28% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$596 million, roughly 114% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 14 agriculture, food, and food processing sectors is approximately \$246 million, or 47% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 47% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:
https://implan.com/index.php?option=com_content&view=category&id=19

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

⁴ GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

⁵ Output = Intermediate Inputs + Value Added

In the top ten by employment, Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is the top employer in the agriculture industry with 400.5 employees. This table also shows the amount of jobs that are created by the agriculture industry in Grant County.

Top 10 Industries Affected by Employment

Sector Description:	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	400.5	\$386,060,582
Support activities for agriculture and forestry	288.9	\$20,431,541
Wholesale trade.....	96.3	\$20,938,762
Truck transportation.....	62.3	\$12,077,574
Grain farming	59.3	\$77,243,894
Real estate.....	43.5	\$6,622,177
Monetary authorities and depository credit intermediation	37.9	\$6,021,304
Landscape and horticultural services	34.0	\$2,053,753
Hospitals.....	26.4	\$3,487,101
Veterinary services	26.3	\$1,617,820

The Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming industry directly contributes approximately \$386 million to Grant County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

Sector Description:	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	400.5	\$386,060,582
Grain farming	59.3	\$77,243,894
Wholesale trade.....	96.3	\$20,938,762
Support activities for agriculture and forestry	288.9	\$20,431,541
Truck transportation.....	62.3	\$12,077,574
All other crop farming.....	16.4	\$7,744,086
Owner-occupied dwellings	0.0	\$7,588,991
Real estate.....	43.5	\$6,622,177
Monetary authorities and depository credit intermediation	37.9	\$6,021,304
Animal production, except cattle and poultry and eggs.....	13.7	\$5,163,821

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Grant County's economy.

[illegible]

All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.